WHAT IS CLAIMED IS:

5

10

15

20

1. An image data processing apparatus which sends data encoded with JPEG 2000, comprising:

a hierarchical encoder which forms a bit stream of hierarchically encoded JPEG 2000 data for each page of a document consisting of a plurality of pages by prioritizing resolution;

an arranger which divides the bit streams of the plurality of pages into a plurality of files based on resolution and arranges the plurality of files of all the pages in a plurality of combinations thereof based on resolution; and

a mailer which writes an electronic mail for each of the combinations by attaching all the files included in the each of the combinations and sends the electronic mails to the same destination.

- 2. The image processing apparatus according to claim 1, wherein said divider forms the plurality of combinations, each of the combinations consisting of the files of the same resolution of all the pages, and said sender writes and sends the electronic mail attached with the files of the lowest resolution before the files of the other resolutions.
- The image processing apparatus according to claim 1,
 further comprising a setter which sets resolution level on

the files to be attached to the electronic mail, wherein said divider forms one of the plurality of combinations by including files up to the resolution level, and said sender writes and sends the electronic mail attached with the files up to the resolution level in the one of the plurality of combinations.

5

15

20

25

- 4. An image processing apparatus which sends data encoded with JPEG 2000 attached to an electronic mail, comprising:
- a hierarchical encoder which forms a bit stream of

 10 hierarchically encoded JPEG 2000 data for each page of a

 document consisting of a plurality of pages by prioritizing

 layer;
 - a divider which divides the bit streams of the plurality of pages into a plurality of files based on resolution and arranges the plurality of files of all the pages in a plurality of combinations thereof based on layer level; and
 - a mailer which writes an electronic mail for each of the combinations by attaching all the files included in the each of the combinations and sends the electronic mails to the same destination.
 - 5. The image processing apparatus according to claim 4, wherein said divider forms the plurality of combinations, each of the combinations consisting of the files of the same layer level of all the pages, and said sender writes

and sends the electronic mail attached with the files of the lowest layer level before sending the files of the other layer levels.

6. An image processing method for sending data encoded with JPEG 2000 attached to an electronic mail, comprising the steps of:

5

15

forming bit streams of hierarchically encoded JPEG 2000 data of a plurality of pages of a document by prioritizing resolution;

10 dividing the bit streams of the plurality of pages into a plurality of files based on resolution;

arranging the plurality of files of all the pages in a plurality of combinations thereof based on resolution;

writing an electronic mail for each of the combinations by attaching all the files included in the each of the combinations; and

sending the electronic mails to the same destination.

- 7. An image processing method for sending data encoded with JPEG 2000 attached to an electronic mail, comprising:
- forming bit streams of hierarchically encoded JPEG 2000 data of a plurality of pages of a document by prioritizing layer;

dividing the bit streams of the plurality of pages into a plurality of files based on layer level;

25 arranging the plurality of files of all the pages in a

plurality of combinations thereof based on layer level; and writes an electronic mail for each of the combinations by attaching all the files included in the each of the combinations; and

sending the electronic mails to the same destination.

8. A computer-readable recording medium which records an image processing program comprising the steps of:

5

10

15

20

forming a bit stream of hierarchically encoded JPEG 2000 data for each page of a document image consisting of a plurality of pages by prioritizing resolution;

dividing the bit stream of each of the plurality of pages into a plurality of files based on resolution;

arranging the plurality of files of all the pages in a plurality of combinations thereof based on resolution; and

writing an electronic mail for each of the combinations by attaching files included in the each of the combinations; and

sending the electronic mails to the same destination.

9. A computer-readable recording medium which records an image processing program comprising the steps of:

forming a bit stream of hierarchically encoded JPEG 2000 data for each page of a document image consisting of a plurality of pages by prioritizing layer;

dividing the bit stream of each of the plurality of pages into a plurality of files based on resolution;

arranging the plurality of files of all the pages in a plurality of combinations thereof based on layer level; and writes an electronic mail for each of the combinations by attaching files included in the each of the combinations; and

5

sending the electronic mails to the same destination.